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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,608	07/01/2004	Hidemi Kurita	0038-0438PUSI	4320
2292	7590	11/03/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			HANAN, DEVIN J	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No. 10/500,608	Applicant(s) KURITA, HIDEKI	
	Examiner Devin Hanan	Art Unit 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9, 13 and 14 is/are rejected.
- 7) ☒ Claim(s) 7, 8 and 10-12 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/29/2004</u> . | 6) <input checked="" type="checkbox"/> Other: <u>IDS 7/1/2004</u> . |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-2 and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaare et al. (U.S. Patent 6,884,020).

Kaare et al. discloses a vertical shaft driving device wherein a plurality of rotary blades each on a planetary shaft are arranged circumferentially of a central shaft and wherein the rotary blades (5) are arranged in a multipoint intersection form, in which blade faces of the blades are obliquely disposed with respect to radial directions with a center at the central shaft.

Regarding claim 2, Kaare et al. discloses all of the claimed elements of claim 1 and wherein four rotary blades are arranged to have a line extended from a blade face of each rotary blade intersect a blade face of the adjacent rotary blade at the right angle (motors 8 are capable of changing the orientation of the blades with respect to one another).

Regarding claim 13, Kaare et al. discloses all of the claimed elements of claim 2 and a rotational control unit which makes angles of the blade faces of the blades with respect to the radial lines, which are extended from the central shaft, larger, with

increasing the rotational speed of the rotary blades, so as to reduce the drag forces working to the blades and a rotational speed of said rotary blades when the rotational speed of the blades exceeds a prescribed speed (motors 8 are capable of changing the angle of attach of the rotary blades 5).

Regarding claim 14, Kaare et al. discloses all of the claimed elements of claim 2 and torque of the central shaft being transmitted to a generator (7).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 5, 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaare et al. in view of Valsamidis (U.S. Patent 5,380,149).

Kaare et al. discloses all of the claimed elements of 1 or 2 above and that the blades are separated from each other (see figure 1), but does not disclose a fixed vane section located close to the outer ends of the blades.

However, Valsamidis teaches for a fixed vane section enclosing the rotary vanes and located close to them in order to maximally exploit the wind irrespective of its direction (col. 2 lines 1-9).

Since Kaare et al. and Valsamidis are both capable of extracting energy from the wind, it would have been obvious at the time the invention was made to a person having

ordinary skill in the art to add the fixed vanes of Valsamidis to the rotor of Kaare et al. in order to maximally exploit the wind (col. 2 lines 1-9).

Regarding claim 9, Kaare et al. discloses rotary blades, but does not disclose them to be a shallow concave plate.

However, Valsamidis teaches for rotary blades that is shallow concave because that shape is more suited for higher wind speeds (col. 2 lines 51-56).

Since Kaare et al. and Valsamidis are both capable of extracting energy from the wind, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to add the shallow concave blades of Valsamidis to the rotor of Kaare et al. in order to have blades better suited for higher wind speeds (col. 2 lines 51-56).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaare et al. in view of Valsamidis and Gaston (U.S. Patent 4,494,007).

The modified apparatus of Kaare et al. discloses all of the above claimed elements of claim 3, but does not disclose the planetary shafts are located on arms.

However, Gaston teaches of arms in order to extend the blades radially away from the central shaft (col. 3 lines 40-51).

Since Kaare et al. and Gaston are both capable of extracting energy from the wind, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to add the arms of Gaston to the rotor of Kaare et al. in order to extend the blades radially away from the central shaft (col. 3 lines 40-51).

Allowable Subject Matter

Claims 7, 8 and 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

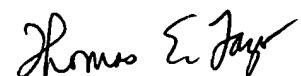
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devin Hanan whose telephone number is 571-272-6089. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on 571-272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Devin Hanan
Patent Examiner
Art Unit 745



THOMAS E. LAZO
PRIMARY EXAMINER